



FOREST AREA IN ILLINOIS, 1985

Mark H. Hansen, *Biometrician*

ABSTRACT.—In 1985 the forests of Illinois covered 4.3 million acres, an increase of 5.7 percent from the 4.0 million acres found in 1962.

KEY WORDS: Statistics, timberland, woodlands, forest type.

Forests are an important resource in Illinois. Twelve acres out of every 100 in the State are forested—a total of 4.3 million acres. Timberland, that land suitable for producing industrial timber, accounts for 4,029,900 acres, nearly all of the forest land in the State. This is an increase of 49,400 acres (1.2 percent) since the last inventory in 1962. Woodlands, forest lands that are unproductive and too poor to grow timber for industrial use, occupied 9,000 acres in 1962. Because of conversion to other uses, the area of woodlands has decreased to the point that none was found in 1985. Forest land reserved for uses other than timber production, such as parks and natural area, increased from 44,900 acres in 1962 to 235,600 acres in 1985, an increase of over 400 percent:

Land use	Survey year		Change since 1962
	1962 ¹	1985	
	----- (Thousand acres) -----		
Forest			
Timberland	3,980.5	4,029.9	+ 49.4
Woodland	9.0	—	— 9.0
Reserved	44.9	235.6	+ 190.7
Total forest	4,034.4	4,265.5	+ 231.1
Nonforest			
Cropland	23,863.6	24,755.0	+ 891.4
Pasture	3,158.0	2,666.8	— 491.2
Other	4,739.2	3,942.7	— 796.5
Total nonforest	31,760.8	31,364.5	— 396.3
All lands	35,795.2 ²	35,630.0 ³	— 165.2

Southern Illinois is the most heavily forested part of the State (fig. 1). There, timberland occupies 27 percent of the land. Pope County, the most heavily forested county in Illinois, is 60 percent timberland (table 1). Forests in this area not only provide employment in the wood products industry, but are also an essential ingredient in the tourist and recreation industry.

In urban and agricultural central and northern Illinois, forests occur in smaller and more scattered units than in the southern part of the State. In the Claypan Inventory Unit in south central Illinois, timberland covers 15 percent of the area; and in the Prairie Inventory Unit in the northern half of the State, timberland covers only 7 percent of the area.

Timberland has decreased in the Southern and Claypan Inventory Units (5.2 and 9.8 percent respectively), due to losses to agriculture, urbanization, reserved land, and other uses. However, in the Prairie Unit there was a 16.9 percent increase in timberland area. Much of this increase in area was wooded pasture, which due to changes in agricultural practices is no longer being grazed. Another reason for an increase in timberland area is marginal cropland which has been converted to timberland. These changes in

¹1962 data have been adjusted to be compatible with 1985 data, due to changes in definitions between surveys.

²Bureau of the Census, Land and Water Area of the United States, 1960.

³National Resources Inventory, Soil Conservation Service, 1982.

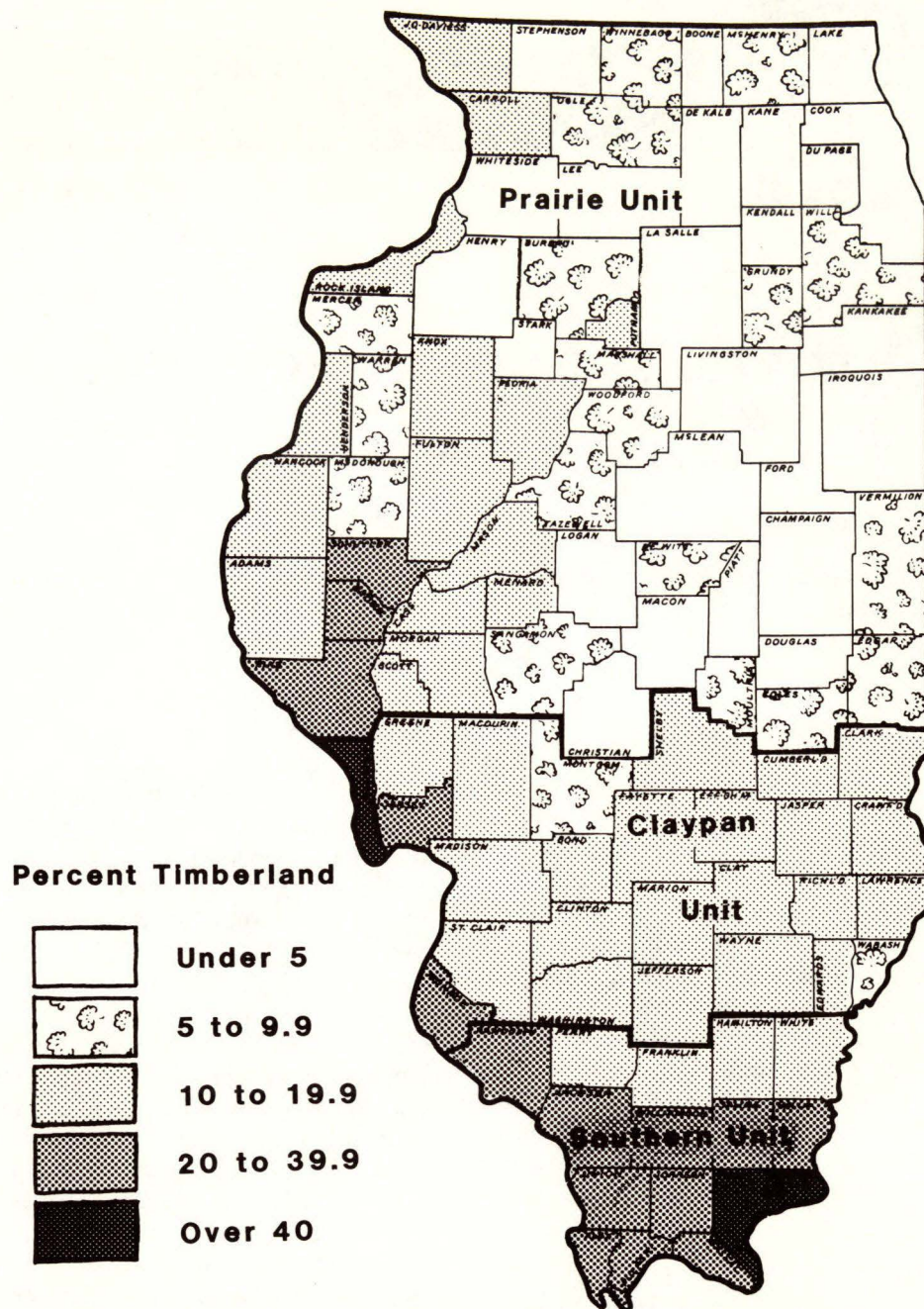


Figure 1.—Timberland as a percent of land area by county, Illinois, 1985.

timberland area are summarized in the following tabulation:

Inventory Unit	Timberland area		Change since 1962
	1962	1985	
	----- (Thousand acres) -----		
Southern	1,109.0	1,051.7	- 57.3
Claypan	1,417.1	1,277.6	- 139.5
Prairie	1,454.4	1,700.6	+ 246.2
	3,980.5	4,029.9	+ 49.4

The oak-hickory forest type makes up half of the timberland area in Illinois, and together with two other major hardwood types—maple-beech-birch (26 percent) and elm-ash-cottonwood (17 percent)—makes up most of the State's timberland area. The lumber and wood products industry in Illinois relies heavily on this land for its raw materials. This industry provides employment for 10,000 people in the State, with an annual payroll of more than 160 million dollars in 1983⁴. Other forest types occupy small but significant

⁴Bureau of the Census, *County Business Patterns—Illinois, 1983*.

Table 1.--Area of land by county and major land use class, Illinois, 1985

SOUTHERN UNIT							
County	Land area	Forest land			Timberland as a percent of land area	Nonforest land with trees	Nonforest land as a percent of land area
		All forest land	Reserved timberland	Timberland			
		Thousand acres	Thousand acres	Thousand acres	Percent	Thousand acres	Percent
Alexander	151.0	58.3	3.8	54.5	36.1	3.0	2.0
Franklin	265.2	47.4	1.6	45.8	17.3	9.8	3.7
Gallatin	207.8	44.0	--	44.0	21.2	6.5	3.1
Hamilton	278.9	40.4	0.8	39.6	14.2	7.1	2.5
Hardin	115.8	64.6	1.1	63.5	54.8	7.6	6.6
Jackson	377.3	134.6	3.8	130.8	34.7	11.7	3.1
Johnson	221.7	89.9	5.5	84.4	38.1	9.9	4.5
Massac	153.9	34.5	2.8	31.7	20.6	6.5	4.2
Perry	283.0	52.8	2.7	50.1	17.7	9.4	3.3
Pope	239.6	149.3	6.4	142.9	59.6	7.9	3.3
Pulaski	130.1	29.7	0.2	29.5	22.7	4.2	3.2
Randolph	372.9	80.7	2.1	78.6	21.1	10.2	2.7
Saline	246.3	54.4	4.1	50.3	20.4	10.3	4.2
Union	265.1	104.7	19.6	85.1	32.1	12.4	4.7
White	318.2	40.3	--	40.3	12.7	9.5	3.0
Williamson	273.7	85.4	4.8	80.6	29.4	10.7	3.9
Total	3,900.5	1,111.0	59.3	1,051.7	27.0	136.7	3.5
CLAYPAN UNIT							
Bond	241.0	29.6	--	29.6	12.3	8.1	3.4
Calhoun	159.8	66.6	1.4	65.2	40.8	9.4	5.9
Clark	322.7	62.5	1.0	61.5	19.1	9.3	2.9
Clay	300.2	48.4	--	48.4	16.1	11.4	3.8
Clinton	302.1	43.2	--	43.2	14.3	7.7	2.5
Crawford	285.2	49.9	0.6	49.3	17.3	8.7	3.1
Cumberland	221.2	33.7	--	33.7	15.2	7.5	3.4
Edwards	142.5	16.6	--	16.6	11.6	4.6	3.2
Effingham	306.0	51.2	0.4	50.8	16.6	11.0	3.6
Fayette	460.1	86.8	4.1	82.7	18.0	16.9	3.7
Greene	347.6	50.7	--	50.7	14.6	14.9	4.3
Jasper	317.2	33.8	0.4	33.4	10.5	9.8	3.1
Jefferson	364.6	69.3	0.2	69.1	19.0	16.8	4.6
Jersey	238.5	63.3	5.7	57.6	24.2	7.6	3.2
Lawrence	239.4	32.5	0.8	31.7	13.2	8.1	3.4
Macoupin	553.5	84.8	0.4	84.4	15.2	21.1	3.8
Madison	466.0	54.2	0.6	53.6	11.5	20.5	4.4
Marion	366.6	67.5	1.9	65.6	17.9	12.8	3.5
Monroe	248.5	51.5	1.3	50.2	20.2	8.7	3.5
Montgomery	450.5	39.4	--	39.4	8.7	12.0	2.7
Richland	230.5	30.5	--	30.5	13.2	9.0	3.9
St. Clair	430.1	51.4	0.4	51.0	11.9	14.7	3.4
Shelby	485.1	55.0	--	55.0	11.3	8.4	1.7
Wabash	143.1	12.6	0.4	12.2	8.5	3.6	2.5
Washington	360.7	51.4	0.8	50.6	14.0	7.6	2.1
Wayne	457.6	62.0	0.4	61.6	13.5	17.4	3.8
Total	8,440.3	1,298.4	20.8	1,277.6	15.1	287.6	3.4

(Table 1 continued on next page)

(Table 1 continued)

County	PRAIRIE UNIT						
	Land area	Forest land			Timberland as a percent of land area	Nonforest land with trees	Nonforest land as a percent of land area
		All forest land	Reserved timberland	Timberland			
		Thousand acres			Percent	Thousand acres	Percent
Adams	545.3	88.6	3.7	84.9	15.6	14.9	2.7
Boone	180.3	8.8	0.3	8.5	4.7	1.2	0.7
Brown	195.9	54.6	3.1	51.5	26.3	10.5	5.4
Bureau	556.2	38.7	3.1	35.6	6.4	9.5	1.7
Carroll	284.5	32.1	2.2	29.9	10.5	6.5	2.3
Cass	239.2	43.3	6.1	37.2	15.6	6.4	2.7
Champaign	638.8	9.0	1.1	7.9	1.2	3.4	0.5
Christian	454.1	21.3	1.6	19.7	4.3	6.2	1.4
Coles	325.5	27.8	2.1	25.7	7.9	6.5	2.0
Cook	613.0	47.9	43.6	4.3	0.7	24.6	4.0
De Kalb	405.6	5.3	0.6	4.7	1.2	1.7	0.4
De Witt	253.7	14.1	0.7	13.4	5.3	4.5	1.8
Douglas	266.9	7.7	0.9	6.8	2.5	1.5	0.6
Du Page	215.5	6.7	0.1	6.6	3.1	6.4	3.0
Edgar	398.7	23.9	0.8	23.1	5.8	5.9	1.5
Ford	310.8	2.9	--	2.9	0.9	2.1	0.7
Fulton	557.0	108.8	4.1	104.7	18.8	21.3	3.8
Grundy	270.3	17.7	1.1	16.6	6.1	3.1	1.1
Hancock	509.1	66.3	2.0	64.3	12.6	15.8	3.1
Henderson	238.7	36.7	3.1	33.6	14.1	4.4	1.8
Henry	527.3	23.1	1.2	21.9	4.2	9.1	1.7
Iroquois	715.7	21.3	1.2	20.1	2.8	6.7	0.9
Jo Daviess	385.8	72.9	2.9	70.0	18.1	15.8	4.1
Kane	335.5	17.1	0.6	16.5	4.9	8.2	2.4
Kankakee	434.3	17.8	2.5	15.3	3.5	5.2	1.2
Kendall	206.2	7.1	0.7	6.4	3.1	2.0	1.0
Knox	460.8	50.5	1.0	49.5	10.7	12.2	2.6
Lake	290.9	4.5	3.6	0.9	0.3	22.5	7.7
La Salle	728.8	39.0	6.2	32.8	4.5	8.7	1.2
Lee	463.9	15.2	2.0	13.2	2.8	4.1	0.9
Livingston	669.1	10.8	0.3	10.5	1.6	3.8	0.6
Logan	396.1	9.9	0.9	9.0	2.3	3.0	0.8
Macon	372.1	8.5	0.6	7.9	2.1	5.5	1.5
Marshall	248.4	25.8	1.6	24.2	9.7	4.4	1.8
Mason	343.1	43.0	3.5	39.5	11.5	4.6	1.3
McDonough	377.3	36.6	2.3	34.3	9.1	9.1	2.4
McHenry	388.2	21.9	1.9	20.0	5.2	7.6	2.0
McLean	758.3	17.5	1.8	15.7	2.1	7.4	1.0
Menard	201.8	21.9	0.8	21.1	10.5	4.6	2.3
Mercer	357.7	34.3	0.7	33.6	9.4	8.1	2.3
Morgan	363.3	41.3	0.7	40.6	11.2	14.4	4.0
Moultrie	214.8	12.7	0.2	12.5	5.8	4.5	2.1
Ogle	486.0	32.3	2.5	29.8	6.1	7.2	1.5
Peoria	397.1	63.2	4.9	58.3	14.7	16.3	4.1
Piatt	281.0	6.7	2.9	3.8	1.4	1.1	0.4
Pike	531.1	122.5	2.7	119.8	22.6	24.4	4.6
Putnam	102.2	16.8	0.6	16.2	15.9	3.1	3.0
Rock Island	270.5	44.9	2.9	42.0	15.5	11.9	4.4
Sangamon	554.0	29.1	0.9	28.2	5.1	9.7	1.8
Schuyler	279.1	84.4	1.8	82.6	29.6	11.2	4.0
Scott	160.4	24.0	0.7	23.3	14.5	5.2	3.2
Stark	184.1	5.2	0.1	5.1	2.8	1.9	1.0
Stephenson	361.3	17.9	0.8	17.1	4.7	6.1	1.7
Tazewell	415.8	28.4	2.1	26.3	6.3	11.1	2.7
Vermilion	575.9	36.4	4.0	32.4	5.6	7.0	1.2
Warren	347.8	22.6	0.5	22.1	6.4	5.3	1.5
Whiteside	437.0	19.9	2.2	17.7	4.1	4.8	1.1
Will	540.0	34.2	4.9	29.3	5.4	8.4	1.6
Winnebago	329.9	22.6	2.2	20.4	6.2	8.7	2.6
Woodford	337.5	30.1	1.3	28.8	8.5	5.2	1.5
Total	23,289.2	1,856.1	155.5	1,700.6	7.3	476.5	2.0
All counties	35,630.0	4,265.5	235.6	4,029.9	11.3	900.8	2.5

areas and add to the diversity of plants and animals found throughout the State:

Forest type	Area timberland (Thousand acres)
White pine	20.2
Loblolly-shortleaf pine	45.5
Oak-pine	13.3
Oak-hickory	2,025.0
Oak-gum-cypress	137.8
Elm-ash-cottonwood ⁵	685.8
Cottonwood ⁶	34.8
Maple-beech-birch	1,046.4
Nonstocked	21.1
Total	4,029.9

Nonforest land with trees occupies a small but significant part of Illinois (2.5 percent). This land provides wildlife habitat, soil protection, timber, and much of the firewood cut in the State. The following tabulation gives a complete breakdown of these nonforest lands with trees:

Nonforest with trees land class	Area of nonforest with trees (Thousand acres)
Cropland with trees	53.5
Improved pasture with trees ⁷	103.6
Natural wooded strips	178.5
Idle farmland	8.1
Marsh	19.3
Windbreaks ⁸	133.1
Wooded pasture ⁹	162.4
Urban and other	242.3
Total	900.8

⁵*Elm-ash-cottonwood type is a lowland forest in which elm, ash, cottonwood, and willow, singly or in combination, comprise a plurality of the stocking.*

⁶*Cottonwood type is forest in which cottonwood comprises a majority of the stocking.*

⁷*Improved pasture with trees.—Land currently improved for grazing by cultivating, seeding, irrigation or clearing of trees or brush that is less than 16.7 percent stocked with all trees.*

⁸*Windbreak.—A small wooded area less than 120 feet wide primarily used to protect buildings, soil and cropland.*

⁹*Wooded pasture.—Pasture land with more than 16.7 percent stocking in all trees, but less than 25 percent stocking in growing-stock trees and would qualify as pastured timberland except that the primary land use is grazing. Evidence of this is severe compaction of the soil from grazing and heavy browsing of the herbaceous and woody understory.*

The information in this note comes from the third Illinois forest inventory, made during 1984 and 1985 by the North Central Forest Experiment Station in cooperation with the Illinois Department of Conservation.

Sampling error was 0.94 percent for the timberland area.

